

First records and discovery of two new species of *Anisomorpha* Gray (Phasmida: Pseudophasmatidae) in Haiti and Dominican Republic

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Abstract

The genus *Anisomorpha* is recorded from the island of Hispaniola for the first time.

Key words

Phasmida, *Anisomorpha*, Haiti, Dominican Republic, first records.

Members of the genus *Anisomorpha* Gray are easily recognisable stick insects characterised by a stout cylindrical body, dark coloration and the ability to spray a toxic defensive chemical. They are exclusively found in the Neotropical region and known in the West Indies area from some islands of the Bahamas, Cuba, Jamaica, and Puerto Rico. Some *Anisomorpha*, e.g. *A. monstrosa* Hebard and *A. buprestoides* (Stoll), are relatively well known and can be found in culture. Although a total of 18 species are contained in the genus, apparently the richness of this group is even greater.

The stick insect fauna of Hispaniola (Dominican Republic and Haiti) is only minimally known as only 12 species have been reported from the island, most during the 18th and 19th centuries (see Langlois & Lelong, 1996, for a list of species). For the past few years, I have collected diverse phasmids throughout the Dominican Republic. Because of the very high level of endemism characterising the stick insects in the archipelago, the probability of discovering previously undescribed species is also high.

Moxey's (1972) unpublished doctoral dissertation contains the only record of *Anisomorpha* on Hispaniola. This work includes the description of a new species from some specimens collected in southern Haiti, but this was never published. This note has the purpose of reporting for the first time the presence of *Anisomorpha* on Hispaniola.

During a visit in the spring of 1999, I collected a large series of orthopteroids within epiphytic bromeliads in the mountains of Sierra de Bahoruco, southwestern Dominican Republic. A total of 15 males and three females were collected from an aggregation of around 25 individuals found piled up inside a group of bromeliads. In capturing the phasmids, many of them ejected appreciable amounts of their milky defensive secretions onto my hands. Most males were subadults, suggesting that they probably originated from the same brood. The insects were killed with cyanide, preserved in layers of napkins and later pinned.

In addition to the 18 specimens collected by myself, I have obtained on loan eight other specimens of *Anisomorpha* collected at Parc La Visite, Massif de la Selle, Haiti, property of the Florida State Collection of Arthropods, Gainesville, Florida, and 33 specimens collected at several localities north-east of Los Arroyos, Pedernales Province, property of the Carnegie Museum of Natural History, Pittsburgh, Pennsylvania. All the above localities are in the eastern portion of the mountain range that runs along the Southern Peninsula of Haiti, an area which was a separate island in the geological past and that is faunistically different from the rest of Hispaniola. *Anisomorpha* appears confined to this portion of the island, not being found in its central and northern portions.

Preliminary examination of these materials reveals that it involves two different and previously unknown species, one represented by the Haitian specimens from La Visite and the other by the Dominican specimens from Puerto Escondido and north-east of Los Arroyos. Important differences between the species are size, coloration, and shape of the female operculum. The description of these two new species of *Anisomorpha* is in preparation.

References

- Langlois, P. & Lelong, P. (1996) Catalogue des phasmes des Antilles. *Le Monde des Phasmes*, 35: 20-26.
Moxey, C.F. (1972) The stick-insects (Phasmatodea) of the West Indies - their systematics and biology. Unpublished PhD thesis, Harvard University, Cambridge, USA.